

Paleo Solution - 280

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Howdy folks. Robb Wolfe, another edition of the PaleoSolution podcast. I'm here today with one of my best friends, the dude that probably saved my life and he could save your life too whether you had crazy people leaping through your windows or you were just dying from adrenal fatigue and sleep deprivation. He is everyone's best doctor, Dr. Kirk Parsley. Doc, how are you doing?

Kirk Parsley: What an intro.

Robb Wolf: Oh men.

Kirk Parsley: I'm doing well. How are you doing?

Robb Wolf: Always good here. Always good at the Lazy Lobo Ranch. We got our first eggs from our chickens today, so pretty exciting.

Kirk Parsley: Yes. One of my friends just sent me a tweet or a text about that. I don't know why that he said Robb's chicken laid an egg, I'm like sweet.

Robb Wolf: Clearly, a slow new state.

Kirk Parsley: Yeah. Clearly, fun is that, yeah.

Robb Wolf: Yeah, yeah.

Kirk Parsley: So what you up to man?

Robb Wolf: Not too much. Got back from the crossfit games. Coach Greg Glassman gave me an invite down there. Got to tootle for a day so thanks to coach Glassman. That was a ton of fun. Got to see a number of people I haven't seen in a long time and that's about it. We hang out with the Wellborns. Their girls and our girls played and fought and ate s'mores and all kinds of fun stuff so it was good.

Kirk Parsley: Gluten free s'mores I'm assuming.

Robb Wolf: Gluten-free s'mores clearly.

Kirk Parsley: Okay great.

Robb Wolf: Gluten free. I didn't even realize that marshmallows have gluten in them, but they do and graham crackers do so yay.

Kirk Parsley: I didn't know that. I didn't know that either. I was thinking of the graham crackers.

Robb Wolf: Yeah.

Kirk Parsley: I thought -- I don't really know what I thought. Marshmallows or just like gelatin and sugar or something.

Robb Wolf: Who knows?

Kirk Parsley: Who knows?

Robb Wolf: Yeah.

Kirk Parsley: Interesting.

Robb Wolf: Yeah. Gluten free all around. The girls had a good time. Yeah. Now we're back home and just full tilt boogie on the city zero stuff and we're here to talk to you today about some of the frequently asked questions around sleep, the Sleep Cocktail and all of that related stuff. So where do you want to jump in on this? You want me to just go down our list like one after another?

Kirk Parsley: Yeah, yeah. I think this list kind of seems to be broken down into kind of equal parts about the product itself and questions. I think most of the questions are on sleep will probably the answer in the questions and answering the questions about our products. So obviously, we can drift into the mechanism of ingredients that we're putting on all that stuff and what waken folks up and how to deal with that and all that should be kind of built into these I think. So let's start with the short list and see what we need to go to after that.

Robb Wolf: Perfect, perfect. So one of the most common questions that we get, is this thing safe to take every day and I'll just roll into somewhat of the second question. Will it suppress melatonin or other neurotransmitter productions? I think these two are pretty linked. There is some concern about will we become dependent on the product? Is there any type of like tachyphylaxis down-regulation of normal neurotransmitter production? What are your thoughts on that?

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Kirk Parsley: Yeah. I would say that's probably one of the top questions I get all the time and the answer to the first part is it's an emphatic yes. It is safe to take every day. However, I'm not advocating that everybody should take it every day. I'm saying it is safe to take every day and if you want to take it every day, as long as you need to take it to re-regulate yourself than take it every day. If you get to the point where you don't need it anymore and you just need it intermittently or for travel or something, then take it then. It's not something that has to be taken every day unless you're kind of one of those people that just can't sleep and I don't mean insomnia.

I mean people who are in night shift or people who travel on a ton of red eyes or first responders, kind of that whole group that we really started all this around. Their sleep's always going to suck and as long as you sleep, all is going to suck and as long as you're always going to be on night shift, then it's going to improve your sleep. In those people, I would recommend probably taking it every day and then for the insomniacs, you might get past this period. I mean the whole idea of this is to re-regulate your biological block to where you don't need anything and we

are supplementing a lot of these pathways that are going to help you regulate, but the vast majority of those are water soluble.

So you're going to get in whatever you're going to get in. You're going to pee out whatever didn't have time to absorb and the vitamin D3 obviously will continue to build up, but everything else is going to wash out in a few hours. So if you're continually deficient on something, you never get out in the sun or you never get enough magnesium or you don't eat any kind of protein and you're tryptophan deficient or whatever is kind of going on or maybe dealing with some depression issues and that's part of your sleep problem so 5-HTP is necessary for you.

There is always the case for people who might need to take it for a longer time, but the whole intent of it is to help people pull that circadian rhythm towards them to be able to go to sleep soon or when they haven't done things correctly or if they're on night shift or whatever or if they are just having problems going to sleep, pull that stuff towards you. Pull that curve towards you. Get you good sleep. Once you're kind of banging out in that rhythm for a month or 3 months or 4 months or 6 months whatever, whenever that comes, just try to not take it here and there. So that's what I say about taking it every day. Now, the melatonin production, I get a ton of questions about and this will kind of segue into I think the next question, the melatonin question is the most common I get about the ingredients. Well, the most common I get is how much of each ingredient is in this.

Robb Wolf: Right, right, right.

Kirk Parsley: And I go well, I have a patent pending. So I'm not allowed to disclose that, but I'm an idiot so I didn't put that on the box and I didn't put that on my website so.

Robb Wolf: Let me jump in on that a little bit.

Kirk Parsley: Yeah.

Robb Wolf: So definitely, some people had a red ass about a proprietary formula. Doc has developed this over years working with special operations folks. He's tweaked and fiddled the formula quite extensively and we are really working towards getting some clinical validation of the product like actual scientific research on this thing. We're trying to set that up in Reno. We're trying to find some other routes towards doing this and we really do think that there is a little bit of magic in what is played out with the formulation and already, there are people in this scene that have pinched

certain elements of the formulation and are trying to roll this stuff out in a copycat fashion.

So that's why we're trying to buy some degree of protection on this so that your hard work actually receive some sort of benefit down the road and we are actually going the extra step in trying to find some clinical scientific validation of the stuff, not just the – I think anecdote is very powerful. I think you do too doc, but it's clearly, if we can get some sort of a prospective or even RCT based studies, then clearly, that lends itself much better towards validating the product. So that's a lot of what went into the reason why it's a proprietary formula.

Kirk Parsley:

Yeah.

Robb Wolf:

So if that gives you a red ass, then you don't need the product as clearly you're better enough that you probably just fall asleep all the time anyway. So there you go.

(00:10:02)

Kirk Parsley:

Yeah, yeah. Even the patent is only going to protect us to a certain degree. As you know, our product is extraordinarily expensive to produce compared to most things that are out there because there are so many ingredients and because of where we source them from and because of the way that we – the guidelines that we produce to buy and test it and recall procedure. Like all the stuff that goes into the cost of producing something is just ridiculous and so people want to pinch like one ingredient and go oh, this is just the same, and it's like here send that out or pinch the two cheapest ingredients and put that out. The patent won't really protect us for too long against that because all you have to do is add a few more things to it and call it something different.

Robb Wolf:

Right.

Kirk Parsley:

But it hopefully will give us long enough to get a foothold into some brand or some brand recognition to where it can continue to be as efficient business or first, it could become a less efficient business and then hopefully continue to be a sufficient business. Yeah and we can continue to do good things for good people and all that jazz and some kumbaya and have all great stuff that comes from that. So we will move on past that. Again, we can only do what we can do and we got to keep that. We got to keep that a little bit of secrecy behind it.

So specifically, I get questions about melatonin and vitamin D3. The vitamin D3 people always want to throw up some kind of anecdotal evidence that taking D3 at night will cause insomnia. I'm not exactly sure

where that sort of folklore comes from. I produced – and the design of this if working through the seals, I didn't get them anytime to take vitamin D3. D3 was actually the first ingredient of this whole cocktail. I didn't give them any time to take it. I didn't say take it a day, take it at night, whatever, just take this much a day and it seemed to work fine.

I've never seen any research on taking at night causing insomnia. Since people did that -- since people had been commenting on that, I've been digging back through the research. We even have a research assistant trying to find something on that. I can't find any literature on that. I haven't had any experience with any of my clients in the Seals that have been taking it for years, literally like 5 or 6 years, and I haven't had anyone say that who's bought these products since we've launched it either.

So to the best of my knowledge, I cannot think of any mechanism why that would be true. Serotonin is a weight promoting neurotransmitter and maybe they're thinking vitamin D3 is going to push to make a bunch of serotonin and that's going to keep you from falling asleep, but nothing would happen that quickly. It can't possibly happen that quick and there is other problems with that idea, and then the melatonin. Hey, I've read if I take melatonin for a long time every day, then it's going to shut down my endogenous production of mela and tonin and I say, no. That is true if you're going superphysiologic with anything, that's true. If you go super physiologic, there's always the potential for down-regulating the actual production or down-regulating the number of receptors that are grabbing hold of that neurotransmitter or hormone or whatever, that's the tachyphylaxis piece.

Tachyphylaxis and endogenous shutdown both come from the same thing. They come from superphysiologic doses of anything. So if you took 10 mg a week of testosterone, you would have slightly higher testosterone and probably not affect your body's production of testosterone at all. If you take a 1000 mg a week of testosterone, you are definitely not going to making your own testosterone that same week you take that injection and as long as you keep taking that injection and both things are happening. Endogenous production of testosterone is going down as well as your androgen receptors are going to decrease, which means you're going to need more and more testosterone and that's what I think people think have with melatonin.

Actually, Dr. Debra from PaleoFX, she came and talked to me about melatonin receptor or melatonin endogenous production going down and if I had any research on that and I've gone back and looked through

all the articles that I have had pulled, done a little poking around on the internet. I have not found anything that has clear evidence of melatonin production being shutdown with taking superphysiologic dosages of melatonin. But it is possibly true and I have heard some whisperings with some ongoing trials right now where they're doing salivary melatonin giving people superphysiologic doses, which is like a milligram of superphysiologic dose, but they're often giving them 3 or 5 or 10 mg a night.

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Doing essentially an ASI on these people, but also capturing DHEA and melatonin and some of these other things and they are finding melatonin going down. This hasn't been published yet so I suspect that that might be true, but there are a lot of little tricky pathways that I won't dig into, but one thing that definitely will happen is you will down-regulate melatonin receptors in your brain with taking more than you need. Now, again, we can't give away the exact dosage of this of how much melatonin we have in our product, but it is definitely physiologic at best. I mean it's probably not even physiologic, which means we are definitely putting less into your brain than your brain would ordinarily produce. Your brain still has to be producing this. So if your brain still needs to produce more, there is no way that we can shut it down for what we're doing. So that's often one of the questions about taking it every day. It's tied to melatonin and we're talking very, very, very, very small amounts of melatonin in this thing so it won't shut that down.

Robb Wolf: And you know I've noticed in some people that are very inflamed maybe still have some significant gut issues going on and whatnot. The product isn't as immediately helpful as folks that have less inflammation going on.

Kirk Parsley: Yeah.

Robb Wolf: That's kind of indirect way of kind of indicating that the amounts of these sleep-producing constituents are not superphysiologic because if we have somebody that's in a superphysiologic state of inflammation, then we're suppressing melatonin production. We maybe have some a variety of receptor site down-regulation because of inflammatory cytokines that seemed to bugger all kinds of receptor sites from insulin to androgens to potentially neurotransmitters so that's just kind of an interesting aside on that, yeah.

Kirk Parsley: Yeah and definitely, we also know that with chronic inflammation and especially with the gut health issues, we're usually running into insulin sensitivity issues as well and then when insulin levels are really high, there are few of these ingredients that won't even get into your brain

because insulin is so high. Tryptophan crosses the blood brain barrier, but if insulin levels are really high, there is usually not pretty much tryptophan around. Because as cells are taking and the glucose from a really high insulin levels, they're also taking in amino acids, but they won't clean up the 5-HTP and so there is some -- as Robb would say bugging pathways that kind of overlap and make this all much more complex, but if...

Robb Wolf: There you have it. So speaking of tryptophan, wasn't it banned by the FDA in the past? Didn't it make people's penises fall off or something like that?

Kirk Parsley: Yeah, yeah, that's a South Park reference. That was hysterical, yeah. They didn't fall off. They shut off.

Robb Wolf: Okay, perfect.

Kirk Parsley: Yeah. They shot off just like firecrackers.

Robb Wolf: It happens to me occasionally.

Kirk Parsley: All the rockets just shot across the room.

Robb Wolf: Right.

Kirk Parsley: Hit the walls. Yeah. So tryptophan was banned I think somewhere around 2007. Now, obviously, let's use our logic here. Tryptophan is an amino acid. It's a ubiquitous amino acid involved in all mammal life and our bodies need it and everybody where I talk a lot about in my lectures about the tryptophan, the turkey coma. Everybody knows about this.

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The FDA is not in the business of banning stuff that occurs in nature and this naturally in your body that. Like what happened is that the way they produce tryptophan is by some microbes that they pull out of the sea and a lot of supplement companies these days are sourcing most of their ingredients from China because it's so inexpensive to do that and they have been for decades and that's what happens. So the Chinese scooped up a bunch of these microbes that they used to produce tryptophan. I forgot the exact pathway. I knew it one time, but they've done it during like a red tide or the equivalent of that. I don't know if they have red tides over there, but the equivalent of like California's red time.

So there are a ton of contaminants essentially in the FDA. So because there are so many sources of so many ingredients and there are so many

supplements on the market, the FDA just took the ultraconservative step at just saying we're going to shut down tryptophan until we know we've cleaned up this mess and we've tested and found all of these bad batches and got rid of them. It's never been a safety issue for the ingredient itself. It's the sourcing of it.

Robb Wolf: Nice. Okay, okay.

Kirk Parsley: Yeah.

Robb Wolf: So why don't we ship internationally?

Kirk Parsley: Oh boy. Well, there are about a dozen reasons for that. Most of it has to do with the other countries. It's not America. It's what other countries allow to be shipped in. So as an example, some countries very accurately call melatonin a hormone and is therefore not over-the-counter. Vitamin D3 is also a hormone and therefore not available over-the-counter in some countries. Every country has its own problem. The team is working very hard to like figure out which countries or which form we need to fill out for which countries to get an application into specifically what they control entering their country and because we have so many ingredients in here, there is something to offend almost everybody. So we've got that going for us which is nice.

So we're working as hard as we can on that. We will let out notifications as soon as we know -- since we gained access to other countries. There is an organization online. I can't speak to the legality of it, but there is an organization online where you can buy an American product and this company will ship it to you wherever you are. It's on the sleep cocktail's website, but I can't remember the name of the company that does that, and again, I don't know if that's legit or not. I don't want to get anybody in trouble so I'd suggest doing a research, your own research if you're going to try that.

Robb Wolf: Cool, cool.

Kirk Parsley: Yeah, yeah.

Robb Wolf: So a common probably folks have when we're talking about sleep issues, one of them is sleep initiation just falling asleep. Another one is this kind of I fell asleep. I felt pretty good then I woke up in the middle of the night. I'm awake for a while, that midnight waking. What's a way to tackle that?

Kirk Parsley: Yeah. So I think that blog series that I did for you covers that pretty well. Not a 100% sure if that's where I blogged about it recently, but I know I talked about it on Nikki's podcast about it as well. So for Readers Digest version and sort of layman's level of science, I've recently sort of started talking about the initiation and maintenance of sleep coming from two separate pathways, right, and then obviously, it's much more complex than that. So Dan Pardi is loading his shotgun right now to blow my head off.

Robb Wolf: Just with salt rock, just with salt rock.

Kirk Parsley: Yeah, but essentially, we have the entrainment with this on, which everybody knows of is circadian rhythm and that's what the vast number or the majority of the ingredients in our product is meant to help initiate the production and maintenance of melatonin. Melatonin is one of the major players in entraining our brains and other parts of our body like our gut is producing tons of melatonin as well, different story, but the neuroplexies of our gut is probably close to as important as our brain.

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So there is the circadian rhythm adaptation so obviously, if you're doing - - that's what keeping a light out of your eyes is about, right. That's what being on a sleep schedule is about. That's where shift works screws up, that's what traveling to different time zones screws up is this circadian alignment of your brain and your body with the sun and that's the big component. That's the biggest one that's probably affected by the lifestyle modifications or the sleep hygiene or whatever you want to call it, sleep ritual. That's what we're mainly attacking now.

Now, the other very big part of shutting your brain down is lack of stimulation right. So light plays a part of this as well, but the reason the CIA extracts information from people by hanging by their hands in shining bright lights on them and playing really loud music is to keep their brain so stimulated that they can't fall asleep. The same thing happens when we're dead tired and we just want to - work and all we can do is think about like as soon as I get home from work, I'm going to sleep, right. As long as and you think about that up until 4:30 when somebody drags you out to happy hour and then like an hour or later, you've had a couple of depressants and now you're super awake. You're happy and you're bouncing around and you forgot all about being tired and that's just stimulating your brain.

So the neurotransmitter that's really involved in shutting down the neocortex, which is the part that's being alert and it's responding to the environment. One of the major neurotransmitter for shutting down the

activity of that neocortex is gaba and that's why we have gabador bit that we have in there and so those two things are both about sleep initiation. Now, it's also possible to just be so completely fatigued, worn out for the day that you can sleep for a couple of hours, but it's pure like sleep pressure from adenosine and it's pure just like inflammatory products interleukin 6 and TNF-alpha in your brain are just shutting you down and you're just like ah. But then as soon as kind of the toxins clear, these people wake back up. So these can be people aren't doing the things right, who aren't doing the sleep hygiene behavior lifestyle modifications that we need to do or they can be people that are super, super stressed out right. So their adrenals even though they fall asleep, their adrenals are still going full boar and then as soon as you take away that heavy sleep pressure, the adenosine, they pop right back away.

So how do you know like what's waking you up? Is it bad dreams? Is it adrenals spiking and you're worried about things or adrenal spiking and you're always adrenalinally spiked? Is it that you were never really ready. Your brain is really never ready to go to sleep anyways?

The answer is yes like all of these things could possibly be happening and multiple things could be happening along that pathway. So what I've been recommending to people to do is first if you're pretty small woman, so like 130 pounds or is less, you have a pretty small frame and all that, you can probably get away with half a dose anyways. So I tell those people to take half a dose to get to sleep if they need it to get to sleep and then leave the other half on their bedside table and then when they wake up in the middle of the night, they don't look at the clock. They don't get up. They don't do anything they don't need to do. They just simply roll over take a sleep cocktail, lay back down and start focusing on your breathing and relaxation or meditation or mindfulness or whatever it is that you do relax. Don't try to go back to sleep. That's the worst thing you can possibly do. It's like telling somebody to try to be spontaneous which is like that's not possible.

Robb Wolf: Be funny.

Kirk Parsley: That's an oxymoron. Be spontaneous right now. So but if you're somebody who needs a full dose, but you can go to sleep fine, then I tell them don't take it when you go to sleep. Just take it when you wake up in the middle of the night. If you're following along with all this other stuff, all the lifestyle modifications that you and I have been beating people over the head with for a decade, then you know when you wake up, there is no alarm clock to look at anyways, right, because your alarm is in your drawer or something like that. So you can't see the clock.

You don't start worrying about what you need to do that next day. You've already made the agreement with yourself that you're getting out of bed when the alarm goes off because that's when you will be fully rested and you just take the sleep cocktail then and you go back to sleep or you lay down and you start relaxing. If your alarm goes off 15 minutes later, you're going to be fine. There's nothing sedating in this product.

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If you get up 15 minutes later as soon as you turn on the lights and take a shower, you're going to be wide awake. This isn't like a drug that's going to knock you out. So that's my recommendation for people so that's the same whether it's the middle of the night waking or the what we all maintenance insomnia people who say they wake up at 5 o'clock in the morning and they don't get out of bed until 7. I don't differentiate those two with this product just because nothing in there last very long. Nothing in there are super physiologic. Just take the product whenever you wake up. You don't look at your alarm clock. Commit to your time in bed. Commit to getting out of bed when the alarm clock goes off and take the product, lie back and relax no matter when you wake up and if you need to take it before you go to bed, try to take half a dose. Maybe some people will actually just need 2 doses. But again, these are problems that I don't expect to be lifelong. These are things that I expect to get better once we entrain the circadian rhythm. You should need that less and less. You should need the middle of the night dose less and less and you should need the initiation dose less and less.

Robb Wolf:

Cool.

Kirk Parsley:

So I talked in some big circles there, but hopefully I corralled the answer you were looking for somewhere.

Robb Wolf:

No, no I like it. I like it and another couple of questions that pop up frequently is the product safe and/or appropriate for pregnant and/or breastfeeding moms?

Kirk Parsley:

Yeah, yeah. That's a goodie because --

Robb Wolf:

I mean you know once we get past shift workers who is more hammered than new parents and clearly the mom usually takes the brunt of that so..

Kirk Parsley:

Right, right. You know Wellborn actually pinged with me that question himself just a few days ago and it wasn't from anyone else. It was from him because he knew someone pregnant.

Robb Wolf: Right.

Kirk Parsley: All the legal stuff that they beat into you in medical school never really goes away so I'm reflexively saying, no, don't do anything to pregnant woman.

Robb Wolf: Right.

Kirk Parsley: When I was going my OB/GYN internship, you start looking for the drugs that are --

Robb Wolf: Teratogens, mutagens and..

Kirk Parsley: Yeah. But even just like the safety categories of drugs, I think it's A through F maybe. It's at least A through D. I'm pretty sure there was like an E and F or whatever. So A is like completely safe like they don't even need sunscreen when you're taking this product just like bam there is no problem with it, bathe in it. And then all the way towards the bottom is like completely unsafe. Everything in the pregnancy world is all rated the same which is basically like no studies have been done on pregnant woman so we can't say conclusively whether or not this is safe and it's called a pregnancy category thing. The reason for that is that no one is ever going to test drugs on pregnant women, pregnant human women to figure out if it's dangerous to their babies for obvious reasons. That's a pretty big social profile.

The legal answer in me is no definitely don't take it. The rational answer in my brain is talk to your obstetrician about it. Show them the ingredients and see if they think there's any problem with it. There is no research about it. But the only thing that I can think of that would be passed that wouldn't ordinarily be in the body is in the mom's breast milk or passed from the mom to the fetus would be the Ph gaba in there. It's just kind of like it's the best gaba derivative you can come up with to cross the blood brain barrier and to act like gaba, but it is a gaba derivative. So could that potentially cause you some problems, cause your baby some problems?

I have no idea. I wouldn't think so. Like because it behaves so much like gaba and it is gaba. It just had something added on to it. I think not, but again I wouldn't bet your baby on it. So I would talk to your obstetrician about it and see what they think and again as would any supplement, I think only take it if you really need it. Even if your obstetrician says it's okay, only take it if you really need it.

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And that's actually an interesting point. One of the first question that we answered about if it's safe to take every day, that because of the PH gaba in there or the pheno gaba, we've had a lot of people say, oh, I've done some research on this and there are people who like it causes dependency or addiction or withdrawals or all this other stuff. And yes that is true. Literally one case of addiction or one case of dependency and one case of withdrawal and all of the medical literature. So it's right on par with the vitamin D toxicity that everybody is so worried about. I know when I started giving people D3 in the Navy, the bureau of medicine in the Navy just came down hard on my head because I was giving so much more than the USRDA vitamin D3 and I was going to cause vitamin D3 toxicity and it was going to kill people right.

First of all, vitamin D3 deficiency manifest itself as nausea and headache and adrenal sort of feeling unwellness and then the solution is to wait until you have less vitamin D3 and you'll feel better. So it's not exactly a horrible exposure, but again, when I looked into the vitamin D3 literature, there were exactly two cases and these people were taking o I want to say 2.5 million IUs per night for 6 to 8 months or something like that. Substantially, more than you or I have ever recommended or will ever recommend.

Robb Wolf: Right.

Kirk Parsley: Orders of magnitude more and the same thing with the PHgaba again, we're putting gaba in your brain that's washing out within about 5 hours and that gaba is just... I can't disclose the exact dose, but that gaba and there is so much less than that one case of dependency and that one case of withdrawal like it was again, it's orders of magnitude much, much, much, much lower. It doesn't matter because anything that you take in that kind of level is going to cause all these problems, but we've engineered this to not have anything super physiologic in it so, yeah. Go take a whole bottle of aspirin. Take a 100 times more aspirin then you see how that works out for you.

Robb Wolf: Yeah, yeah. I mean the LD50 on water is quite a bit worse than most these other things. Really good question and particularly in this day and age of Google and Wikipedia were you can become reasonably well educated on something pretty quickly. It's definitely good stuff, but digging around the literature thinking about the metabolic pathways and whatnot probably not huge concerns.

Kirk Parsley: Yeah.

Robb Wolf: It's going to take --

Kirk Parsley: Yeah, yeah.

Robb Wolf: Okay.

Kirk Parsley: Yeah. I mean definitely not huge concerns. I mean what we're dealing here with this all stuff that I've been dealing with for years and years and years with people. Again, the only reason this product exist is because I was trying to supplement exactly what people were deficient in or my clients or the Seals at the time were most often deficient in. I'm just like just give everybody this because a lot of people are deficient in this so let's give them that. Let's give them this and we just did the same thing along the pathway and then we tinkered with the dosage. There is probably several thousand people that have been taking this for multiple years and I've never seen anyone have any withdrawals or tachyphylaxis or whatever stuff. All extraordinarily safe product.

Robb Wolf: Cool okay. Doc-

Kirk Parsley: Yup. The other thing people always ask is can you give it to kids. Again, I have to give the medical legal answers discuss it with your pediatrician. My answer is a human being on earth – my kids take it so take that for what it's worth.

Robb Wolf: And you know with all the stuff with the pregnant and lactating mom, with the kids all that, clearly, again, all is many of the other diet lifestyle stress features need to be tackled. If the kids are getting super high refined carbohydrate diet, if they're sitting up watching videos and playing with video games when they should have been winding down and reading books and getting ready to go to bed, frequently a lot of these issues can be very, very well addressed by tackling the nutrition and lifestyle factors that are going to overwhelm any type of product like this if you don't address those first.

(00:40:12)

Kirk Parsley: Yeah absolutely. There is nothing magic in this thing. If you do everything wrong and you take this product, you probably not going to find it very useful. Yeah. Yeah.

Robb Wolf: Doc, did we miss anything?

Kirk Parsley: I want to throw in a little bit just kind of making a hodge-podge one question out of I constantly get beat up by various people about why is there stevia in it, why is there Xylitol, it's so sweet. It's so damn sweet or

a big cohort of people saying well I have to get up and go to the bathroom like 10 times a night. So I don't want to take these product because it's more liquid.

So I'd kind of like to address all of that at once. So the other thing people ask you is what's in the natural flavoring I investigated the hell out of that. The natural flavoring is essentially vegetables and berries. They can crush these things up and they put various amounts of vegetables and berries and they make them into a powder and then they can add... They can shift these things back and forth and kind of make them taste like apple or make them taste like blueberries or whatever. So it's essentially dehydrated fruits and vegetables is that, that's off the table. Stevia, a lot of people complain about the stevia. I can tell you that the magnesium has a very, very metallic taste. We have a super, super low dose of stevia in there. I think it's like 10 whatever – I don't even remember what the common – is it micrograms or milligrams they usually measure stevia in? But...

Robb Wolf: Micrograms.

Kirk Parsley: Micrograms. Yes. I think it's literally like 10 mg of this stuff in there and it's just to kind of get rid of that metallic taste of the magnesium. So we can't really get rid of that and a lot of people have been complaining that that they have a reaction to stevia. They don't want to take stevia, blah, blah, blah. My answers I 'm sorry. I don't know how to get rid of that yet. We're always working on new flavoring and so maybe we will. Xylitol I don't really know of anybody who has complained about Xylitol. I get that all the time. I can't speak to that. It's like in my mind, it's the best kind of sweetener you can put into something. This stuff literally taste like I think Robb you've tried the unflavored sample as well. Did you ever try that?

Robb Wolf: Yeah. I would rather snort it and drink it.

Kirk Parsley: Yeah. It's like a burnt petroleum kind of flavor, a burnt petroleum metallic flavor. It's just a horrid, horrid concoction. So you go to do something to make this stuff palatable and if it's not and all of bioavailability comes from the fact that this is a powder in a liquid and you don't have to dissolve the capsules and glycine coding of this capsule and the gelatin coating of that capsule and all of that stuff.

We're doing this so that everything is bioavailable all at once. It's kind of like a big surge to help push that snowball over the precipice and hopefully, it cascades downhill. So you can adjust—the other thing I tell

people is that you can adjust the flavor significantly on this. First of all as the packet says, put it on warm water, it tastes a whole lot like apple cinnamon when it's in warm water like pretty warm water. When it's in cold water, it taste like kind of a tart apple like kind of like a sour green apple. So you can make it taste better by putting it in warm water as opposed to cold water. Also it dissolves a little better.

Then for the people who have like getting up in the morning or getting up in the middle of the night to pee, I just tell these people just mix than less water like there is no magic about 8 ounces. That's just kind of like a standard coffee cup which is why the package says 8 ounces. Mix it in 2 ounces, do a little shot of the stuff, who cares. It's not a big deal, but obviously the less water you mix it, kind of the stronger the taste is going to be, the stronger the sweetness is going to be. If it's way too sweet for you, then mix it in more water, right. It's not rocket surgery. It's easy so.

Robb Wolf: You had a note here lime or lemon like is there anything about putting a little spritz of lemon or lime juice in it. Yeah.

Kirk Parsley: Yeah for the people who find it overly sweet like I do because I've been running ketogenic diet for nearly two years now. So like everything is sweet to me. I mean green beans are sweet to me.

(00:45:04)

So what I do is I put a little lime in it. Cindy prefers lemon, but that citrus will kind of give a little bite to take away that sweetness and especially that after taste sweetness of the stevia so that something else you can do, throw that in there too.

Robb Wolf: Cool.

Kirk Parsley: Good catch, Robb, good catch.

Robb Wolf: Okay. Well I almost missed that whole question so I don't know how to good of a catch it was, so, details.

Kirk Parsley: Details, details.

Robb Wolf: Doc Parsley picked a very detail oriented partner in this whole thing in myself so. Yeah.

Kirk Parsley: Sadly neither one of us are detailed guys. We've got to go lasso.

Robb Wolf: Peter Attiya or somebody qualified, yeah, totally, totally.

Kirk Parsley: And like tie him to the ceiling until he gets everything aligned for us.

Robb Wolf: Right. You won't go home until this whole things works. So yeah.

Kirk Parsley: Yeah.

Robb Wolf: Awesome. Let's see here, if folks want to check this out and your Robb Wolf listener, which I assume that you are listening to this podcast, you can use a discount code Robb Wolf, when you do your checkout. Doc what does that get them 5% discount, 10%, 5%?

Kirk Parsley: Yeah uh, you being my boy

[Crosstalk]

My boy blue. You being the original affiliate and all that stuff, you will ad infinitum have a 5% discount so. Not the case with every affiliate but that's the case with Robb Wolf. So and we will probably do some promotions here and there for your audience to get you 10% here. A couple of times a year or something.

Robb Wolf: Cool, cool.

Kirk Parsley: Yeah.

Robb Wolf: Awesome. Doc, where can folks track you down if they want more information on the sleep cocktail or the other things you have going on. Where they can find you?

Kirk Parsley: Well, sadly, I'm very much in a microblogging phase of my life right now because I have so much other stuff going on. Smoking cigarettes and watching Captain Kangaroo and all that stuff. I just have so much going on. I'm having a hard time keeping up with emails and definitely have a hard time keeping up with blogs. So Twitter probably unfortunately is like the most likely you get an answer from me within a 140 characters or whatever it is. So that's @docparsley.

Robb Wolf: Cool, cool.

Kirk Parsley: Yup. Then people can check out the site if they wanted to just bury themselves in a nauseating amount of information about the product. I mean I don't think that there is anything where you've been asked that we haven't made a frequently asked question out of or put in the actual

what do you call it? I don't know not the literature, but the actual text of the site.

Robb Wolf: Cool. And we still have like a 2 hour video at sleepcocktails.com where you and I talked?

Kirk Parsley: Yeah. The sleepcocktails.com still has you and I on there. I think it's an hour and 42 minutes or something, it feels kills like that. Were going chopping that up into some sound bites so people don't have to read an encyclopedia to understand the product. They can click on a couple of two or three- minute videos. So we'll be chopping that up soon.

Robb Wolf: Awesome. Any speaking engagements coming up or just pretty much head down working on this stuff and your other projects?

Kirk Parsley: Yeah. I have a couple of pretty big gigs coming out. One is very near and dear to my heart is this with speck war and I can't. It's too secret for me to tell you exactly where I'm going but it's way up to food chain on that and we're going to see if we can't get a little bit of traction with evolutionary health and within the military. You know, all of that voodoo that I was doing when I was a Navy doctor is becoming more interesting to them now so.

Robb Wolf: They just don't want anybody in the command structure recommend the good stuff.

Kirk Parsley: Yeah, yeah.

Robb Wolf: You have to be a consultant on the outside.

Kirk Parsley: Yeah. they weren't big fans, they were getting it for free. Now that they have to pay to get information from me, they're more than willing it seems so. No, but that would be a really good gig. I hope to get some traction. You know, one of the few times I will travel around and lecture for free is to help out military and agencies and so forth so. I got that coming up and I have a couple of gigs with – we'll just call them really exclusive secret hand shake club kind of lectures and I don't know. I think I have the sports one, a probational team up in October I think so.

[0:50:00]

Robb Wolf: So what you're saying is basically none of us peons will be able to ping you any time soon? That's what I was really fishing for.

Kirk Parsley: Yeah, well I would be more than happy to do Joe six-pack lectures but I don't get invited to any of them. So if somebody invites me to some of

those lectures, I'd be more than happy to do them, but it's seem to be kind of little niches that want to employ my services.

Robb Wolf: Cool okay. Probably better to keep you away from public consumption.

Kirk Parsley: Probably, the fear people I offend before it's time to retire is better.

Robb Wolf: Yeah. We'll reserve that for me. I seem to be pissing people off a lot lately so good.

Kirk Parsley: The truth is a controversial topic man.

Robb Wolf: Indeed and hence the title of my now defunct political podcast Controversial Truth so. Yeah. Awesome doc. Well it was great catching up with you. Thanks for taking the time to answer all these questions. So @docparsley for Twitter, [www.sleepcocktails](http://www.sleepcocktails.com) with an S.

Kirk Parsley: With an S, yup.

Robb Wolf: -- .com. to check out more info on the products.

Kirk Parsley: We're going to have to change that name too. So we'll be changing that eventually to just so your audience knows because we're trying to pull the wool over anybody's eyes but that site is actually blocked from a lot of corporate and government internets because of the word cocktails in it so. Like people at Microsoft can't log on to sleepcocktails.com, and liked DOD people can't log on to the site. So yeah, unfortunate choice of names but what the hell do we know about so and supplements.

Robb Wolf: Again super qualified people putting this thing together. We thought of every contingency and then neglected the action in them so.

Kirk Parsley: Yes, yes.

Robb Wolf: Awesome Doc. Okay. Well take care. We'll talk to you soon.

Kirk Parsley: Okay. Cool.

Robb Wolf: Okay. Bye.

(00:51:59) End of Audio